



SEQUENCE LISTING

<110> Ota, Toshio
Nishikawa, Tetsuo
Salamov, Asaf
Isogai, Takao

<120> METHOD FOR SCREENING FULL-LENGTH cDNA
CLONES

<130> 06501-058001

<140> 09/529,962

<141> 2000-04-20

<150> JP 9/289982

<151> 1997-10-22

<150> PCT/JP98/04772

<151> 1998-10-21

<160> 18

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 30

<212> RNA

<213> Artificial Sequence

<220>

<223> Oligo-capping linker sequence

<400> 1

agcaucgagu cggccuuguu ggccuacugg

30

<210> 2

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligo(dT) adapter primer sequence

<400> 2

gcggctgaag acggcctatg tggccttttt tttttttttt tt

42

<210> 3

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Random adapter primer sequence

<221> misc_feature

<222> (1)...(32)

<223> n = A,T,C or G

<400> 3

gcggctgaag acggcctatg tggccnnnnn nc

32

<210> 4

<211> 880

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(880)

<223> n = A,T,C or G

<400> 4

atgcgcccgc	gcggccctat	agggcgctcc	tccgcccgc	gcccgggagc	cgcagccgcc	60
gccgccactg	ccactcccgc	tctctcagcg	cgcgcgtcgc	caccgccacc	gccactgcc	120
ctaccaccgt	ctgagctctgc	agtcccgaga	tcccagccat	catgtccata	gagaagatct	180
gggcccggga	gatcctggac	tcccgcggga	acccacagct	ggaggtggat	ctctatactg	240
ccaaaggctc	tttcgggct	gcagtgccca	gtggagcctc	tacgggcate	tatgaggccc	300
tggagctgag	ggatggagac	aaacagcggt	acttaggcaa	aggtgtcctg	aaggcagtgg	360
accacatcaa	ctccaccatc	gcgccagccc	tcacagctc	aggtctctct	gtggtggagc	420
aagagaaact	ggacaacctg	atgctggagt	tggatgggac	tgagaacaaa	tccaagtttg	480
gggccaatcc	atcctgggtg	tgtctctggc	cgtgtgtaag	gcangggcaa	ctgaacngga	540
actgccccctg	tatcgccaca	ttgctcagct	tggncgggaa	ctcanacctc	atcctgcctg	600
ttgccggcct	tcaacgtgat	caatgggttg	cttctcatgc	ctggcaacaa	anctggccat	660
tgcnggaatt	ttcatgatcc	tccccnttgg	gaaactgaaa	aactttccgg	aatgcccttc	720
caactaagtt	gcaaaaggct	taccnatacc	ccccaaaggg	aattcctcca	agggaaacaaa	780
tnccggggaa	aggaatgccc	cccaattntt	ngggggaata	aaaggtgggc	tttgcccccc	840
cattttcctg	gaaaaaacna	tnaaaaccct	tgggaaactt			880

<210> 5

<211> 645

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(645)

<223> n = A,T,C or G

<400> 5

tgtgcgttac	ttacctcnac	tcttagcttg	tccggggacgg	taaccggggac	cgggtgtctg	60
ctcctgtcgc	cttcgcctcc	taatccctag	ccactatgcg	tgagtgcac	tccatccacg	120
ttggccaggc	tgggtgtccan	attggcaatg	cctgctggga	gctctactgc	ctggaacacg	180
gcacccagcc	cgatggccag	atgccaaagt	acaagaccat	tgggggagga	gatgactcct	240
tcaacacctt	cttcagttag	acgggcgctg	gcaancacgt	gccccgggct	gtgtttgtag	300
acttgggaacc	cacagtcatt	gatgaagtgc	gcactggcac	ctaccgccag	ctcttccacc	360
ctgagcagct	catcncaggc	aaggaagatg	ctgccaatga	ctatgcccca	gggcactaca	420
ccattggcaa	ggagatcatt	gaccttgtgt	tggaccgaat	tcgcaagctg	gctgaccant	480
gcaccggtct	tcanggtctc	ttgggtttcc	acagcttttg	tgggggaact	ggttctgggt	540
tcacctccct	gctcatggaa	cgtctctcag	ttgattatgg	caagaaatcc	aagctggagt	600
tctccattta	cccagcaccc	cnggtttccn	cngctgtant	tnгаа		645

<210> 6

<211> 820
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1) ... (820)
 <223> n = A,T,C or G

```
<400> 6
cttttttcgc aacggggttg cgcgcagaac acaggtgtcg tgaaaactac ccctaaaagc      60
caaaatggga aaggaaaaga ctcatatcaa cattgtcgtc attggacacg tagattcggg      120
caagtccacc actactggcc atctgatcta taaatgcggt ggcacgcaca aaagaacccat      180
tgaaaaattht gagaaggagg ctgctgagat gggaaagggc tccttcaagt atgcctgggt      240
cttgataaaa ctgaaagctg agcgtgaacg tggatcacc attgatattc ccttgtggaa      300
atttgagacc agcaagtact atgtgactat cattgatgcc ccaggacaca gagactttat      360
caaaaacatg attacaggga catctcaggc tgactgtgct gtctgattg ttgctgctgg      420
tgttgggtgaa tttgaagctg gtatctccaa gaatgggcag acccgagagc atgcccttct      480
ggcttacaca ctgggtgtga aacaactaat tgcggtgtt aacaaaatgg attcactgan      540
ccaccctaca gccagaagaa atatgangaa attgttaagg aagtcagcac ttacattaag      600
aaaattggct acaaccccga cacagtanca tttgtgccaa tttctgggtg gaatgggtgac      660
aacatgctgg aaccaantgc taacatgcct tggttccagg gatggaaaat ccccnttaa      720
ggatggcnat gccattggaa cccctctgct tgaaggctct ggantgcac ctanaccaa      780
ctccttcaaa ttgaaaaacc ccttgcncce gctcncce      820
```

<210> 7
 <211> 788
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1) ... (788)
 <223> n = A,T,C or G

```
<400> 7
gaggctgagg cagtggctcc ttgcacagca gctgcacgcg ccgtggctcc ggatctcttc      60
gtctttgcag cgtagcccga gtcggtcagc gccggaggac ctcagcagcc atgtcgaagc      120
cccatagtga agccgggact gccttcattc agaccagca gctgcacgca gccatggctg      180
acacattcct ggagcacatg tgccgctgg acattgattc accaccatc acagcccgga      240
acactggcat catctgtacc attggcccag cttcccgatc agtggagacg ttgaaggaga      300
tgattaagtc tggaatgaat gtggctcgct tgaactctc tcatggaact catgagtacc      360
atgcggagac catcaagaat gtgcgcacag ccacggaaag ctttgcctct gaccccatcc      420
tctaccggcc cgcttgcctg gctctagaca ctaaaggacc tgagatccga actgggctca      480
tcaagggcag cggcactgca gaggtggagc tgaagaatgg agccactctc aaaatcacgc      540
tggaataatgc ctacatggaa aagtgtgacg agaacatcct gtggctggac tacaagaaca      600
tctgcaagggt ggtggaagtg ggcaacaaga tctacgtgga tgatgggctn atttctctcc      660
aggtgaacac aaaggtgccg acttctctgg tgacngangt ggaaaatggg ggctccttgg      720
gcncaagaaa ggtgtgaact tctgggggct gctgtggant tgctgctgt gtcncaaaaa      780
gacatcca
```

<210> 8
 <211> 608
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
 <222> (1)...(608)
 <223> n = A,T,C or G

<400> 8
 acagcctggc tcctttgagt atgaatatgc catgcgctgg aaggcactca ttgagatgga 60
 gaagcagcag caggaccaag tggaccgcaa catcnaggag gctcgtgaga agctggagat 120
 ggagatggaa gctgcacgcc atgagcacca ggtcatgcta atgagacagg atttgatgag 180
 gcgccaagaa gaacttcgga ggatggaaga gctgcacaac caagangtgc aaaaacgaaa 240
 gcaactggag ctcaggcagg aggaanagcg caggcgccgt gaagaanaga tgcggcggca 300
 gcaagaagaa atgatgcggc gacngcagga aggattcaag ggaaccttcc ctgatgcgag 360
 agagcaggag attcggatgg gtcngatggc tatgggaggt gctatgggca taaacnacag 420
 atgtgccatg cccctgctc ctgtgccagc tggtagccca gctcctccag gacctgccac 480
 tattatgccg gatggaactt tgggattgac cccacnaca actgaacgct ttggtcnggc 540
 tgctacnatg gaangaattg gggcaattgg tggaaactcc cctgcattcn accgtgcagc 600
 tcctggga 608

<210> 9
 <211> 608
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(608)
 <223> n = A,T,C or G

<400> 9
 atattaaact agtgaagcaa ctaagagaaa atgttaagtc tgctattgat cttgaagaga 60
 tggcatctgg tcttaacaaa agaaaaatga ttcagcatgc tgtattttaa gaacttgtga 120
 agcttgtaga ccttgaggtt aaggcatgga caccactaa aggaaaacaa aatgtgatta 180
 tgtttgttgg attgcaaggg agtggtaaaa caacaacatg ttcaaagcta gcatattatt 240
 accagaggaa aggttggaag acctgtttaa tatgtgcaga cacattcaga gcaggggctt 300
 ttgaccaact aaaacagaat gctaccaaag caagaattcc attttatgga agctatacag 360
 aaatggatcc tgtcatcatt gcttctgaag gagtagagaa atttaaaaat gaaaattttg 420
 aaattattat tgttgataca agtggccgcc acaaacaaga agactctttg tttgaagaaa 480
 tgcttcaagt tgctaattgct atacaacctg ataacattgt ttatgtgatg gatgcctcca 540
 ttgggcaggc ttgtgaagcc caggctaagg cttttaaaga taaagtagat gtacctcagt 600
 aatagtgaca aaacttgatg gccatgcaaa angaagtggg gcactcagtg cagtgcgtgc 660
 cacaaaaaat ccgattattt tcattgggtac agggggaaca tatanatgac tttgaacctt 720
 tcaaaaacac agccttttat taacaaactt cttggtatng gcgacattga aaggactgat 780
 aaataaagtc cacnaattga aatttgatg acnatgnaaa cccttattga aaaaattgaa 840
 acatngtcca gttttacttt gcgaaacnt 869

<210> 10
 <211> 813
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(813)
 <223> n = A,T,C or G

<400> 10
 gttgtggtat ctgtattaag aaatgccctt ttggcgctt atcaattgtc aatctaccaa 60
 gcaacttggg aaaagaaacc acacatcgat attgtgccaa tgccttcaaa cttcacaggt 120

tgccctatccc	tcgctccaggt	gaagtttttg	gattagttgg	aactaatggt	attggaaagt	180
caactgcttt	aaaaatttta	gcaggaaaac	aaaagccaaa	ccttggaag	tacgatgatc	240
ctcctgactg	gcaggagatt	ttgacttatt	tccgtggatc	tgaattacaa	aattacttta	300
caaagattct	agaagatgac	ctaaaagcca	tcatacaacc	tcaatatgta	gaccagattc	360
ctaaggctgc	aaaggggaca	gtgggatcta	ttttggaccg	aaaagatgaa	acaaagacac	420
aggcaattgt	atgtcagcag	cttgatttaa	cccacctaaa	agaacgaaat	gttgaagatc	480
tttcaggagg	agagttgcag	agatttgctt	gtgctgtcgt	ttgcatacag	aaagctgata	540
ttttcatggt	tgatgagcct	tctagttacc	tagatgtcaa	gcagcgttta	aaggctgcta	600
ttactatacy	atctctaata	aatccagata	gatatatcat	tgtggtggaa	catgatctaa	660
gtgtattaga	ctatctctcc	gacttcatct	gctgtttata	tgggtgtacca	agcgccatg	720
gaattgtcac	tatgcctttt	agtgttagaa	aaggcataaa	cnttttttgg	atgggtatgt	780
tccaacagaa	aacttganaa	tcnnaaatgc	ntc			813

<210> 11

<211> 655

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (655)

<223> n = A,T,C or G

<400> 11

agactctcac	cgcagcggcc	aggaacgcca	gocgttcacg	cgttcgggtcc	tccttggctg	60
actcaccgcc	ctcgccgccg	caccatggac	gccccaggc	aggtgggtcaa	ctttgggcct	120
ggtcccgcc	agctgccgca	ctcagtgttg	ttagagatac	aaaaggaatt	attagactac	180
aaaggagtgt	gcattagtgt	tcttgaaatg	agtcacaggt	catcagattt	tgccaagatt	240
attaacaata	cacagaatct	tgtgcgggaa	ttgctagctg	ttccagacaa	ctataagggtg	300
atTTTTctgc	aaggaggtgg	gtgcggccag	ttcagtgtgt	ttcccttaaa	cctcattggc	360
ttgaaagcag	gaagggtgtgc	ggactatgtg	gtgacaggag	cttgggtcagc	taaggccgca	420
gaagaagcca	agaagtttgg	gactataaat	atcgttcacc	ctaaacttgg	gagttataca	480
aaaattccag	atccaagcac	ctggaacctc	aaccanattg	cctcctaagt	gttttattgc	540
ncaaatgaaa	cggtgcatgg	tgttganttt	gactttatac	ccnatgtcaa	gggaacanta	600
ctggtttgtg	acattttcct	ccaacttctc	gtccaancca	attgnatggt	tccaa	655

<210> 12

<211> 599

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (599)

<223> n = A,T,C or G

<400> 12

aaagatgcgc	aggcgccgtg	tggcactcgg	cgggtcgaaag	gggagttcaa	ggagacgggg	60
gcgacgcggc	tgagggcttc	tcgtcggggg	cggggctgca	gccgtcatgc	cggggatagt	120
ggagctgccc	actctagagg	agctgaaagt	agatgaggtg	aaaattagtt	ctgctgtgct	180
taaagctgcg	gccatcact	atggagctca	atgtgataag	cccaacaagg	aatttatgct	240
ctgccgctgg	gaanagaaag	atccgaggcg	gtgcttagag	gaaggcaaac	tggtcaacaa	300
gtgtgctttg	gacttcttta	ggcagataaa	acgtcactgt	gcagagcctt	ttacagaata	360
ttggacttgc	attgattata	ctggccagca	gttatttcgt	cactgtcgca	aacagcaggc	420
aaagtttgac	nagtgtgtgc	tggacaaact	gggctgggtg	cggcctgacc	tgggaaaact	480
gtcaaaggtc	accaaagtga	aaacagatcn	acctttaccg	ganaatccct	atcactcaag	540
aacaagaacg	gatcccagcc	ctganatcna	aggaaatctg	cancctgcca	cacatggca	599

<210> 13
 <211> 597
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(597)
 <223> n = A,T,C or G

<400> 13
 atatccggag tagacggagc cgcagtagac ggatccgcgg ctgcaccaaa cactgccctt 60
 cggagcctgg tagtgggcca caagccccca gtcccagagg cgtgattttc tggcatcctt 120
 aaatcttgtg tcaaggattg gttataatat aaccagaaac catgacggcg gctgagaacg 180
 tatgctacac gtttaattaac gtgccaatgg attcagaacc accatctgaa attagcttaa 240
 aaaatgatct agaaaaagga gatgtaaagt caaagactga agctttgaag aaagtaatca 300
 ttatgattct gaatggtgaa aaacttcctg gacttctgat gaccatcatt cgttttgtgc 360
 tacctcttca ggatcacact atcaagaaat tacttctggt attttgggag attgttccta 420
 aaacaactcc agatgggaga cttttacatg agatgatcct tgtatgtgat gcatacagaa 480
 aggatcttca acatcctaata gaattttattc naaggatcta ctcttcgttt tctttgcaaa 540
 ttgaaanaaa canaattgct aaaaccttta atgccancta tncctgcatt tttggga 597

<210> 14
 <211> 634
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(634)
 <223> n = A,T,C or G

<400> 14
 agactctcac cgcagcggcc aggaacgcca gccgttcacg cgttcgggtcc tccttgggtg 60
 actcaccgcc ctgcgcccg caccatggac gccccaggc aggtgggtcaa ctttgggcct 120
 ggtcccgcca agctgccgca ctacagtgtt ttagagatac aaaaggaatt attagactac 180
 aaagganttgc gatttagtgt tcttgaaatg agtcacaggt catcagattt tgccaagatt 240
 attaacaata cagagaatct tgtgcgggaa ttgctagctg ttccagacaa ctataagggtg 300
 atttttctgc aaggagggtg gtgcggccag ttcagtgtctg tccccttaa cctcattggc 360
 ttgaaagcag gaangtgtgc ggactatgtg gtgacaggag cttgggtcagc taaggccgca 420
 naanaagcca agaantttgg gactataaat atcgttcacc cttaaacttgg gagttataca 480
 aaaattccag atccaagcac ctggaacctc aaccagatg cctcctacgt gtattattgc 540
 gcnaatgaaa cngtgcattg tgtggantct gactttatac ccgatgtcna ggggaacatac 600
 tgggttgtga catgtctca aacttcccg tccna 634

<210> 15
 <211> 757
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(757)
 <223> n = A,T,C or G

<400> 15

```

agtctgcggt gggctancgg acggtccggc ttccggcggc cgtttctgtc tcttgctggc      60
tgtctcgctg aatcgcgggc gcctttctcat cgctcctgga aggtcccagag cgcgacacca      120
tgtcggaacc cggggggcggc ggcgggcgaag acngctcggc cggattggaa gtgtcggccg      180
tgcanaatgt ggcggacgtg tcgggtgctgc anaagcacct gcgcaagctg gtgccgctgc      240
tgctggagga cggcgggcgaa gcgcccggcg cgctggaggc ggcgctggag gagaagagcg      300
ccctggagca gatgcgcaag ttcccttcgg acccgcacgt ccacacggtg ctggtggagc      360
gctccacgct caaagtggac gtcggtgatg aaggagaaga agaaaaagaa ttcatttcct      420
ataacatcaa cntagacatt cactatgggg ttaaatecaa tagcttggca ttcattaaac      480
gtactcccggt gattgatgca gataaaccgg tgtcttctca nctccgggtc cttacactca      540
gtgaanactc nccctacnaa aactttgcat tctttcatta acaatgcagt ggctcctttt      600
tttaantcct acattaaaaa atctggcaag gcaaacaggg atggtgataa aatggctcct      660
tcnttgaaa aaaaaattgc cgaactcnaa atnggactcc ttcccttgca ncaaaatttt      720
tgaaattccg gaaaatcanc ctgcccaatt cctcccc      757

```

```

<210> 16
<211> 300
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(300)
<223> n = A,T,C or G

```

```

<400> 16
atcatttcct tatttatatt tcatgttgga atgcttaaatt cgataacctt tgtattttga      60
agtgcgcgac atggaagggtg atctgcaaga gctgcatcag tcaaacaccg ggggataaat      120
ctggatttgg gttccggcgt caagggtgaag ataataccta aagaggaaca ctgtaaaatg      180
ccagaagcag gtgaanagca accacaagtt taaatgaaga caagctgaaa caacgcaagc      240
tggttttata ttagatattt gacttaaact atctcaataa agttttgcag ctttcaccac      300

```

```

<210> 17
<211> 313
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

```

```

<400> 17
aaagatggcg gcgggggagg taggcagagc aggacgcgcg tgctgccgcc gccaccgcgc      60
cctccgctcc agtcgcctcc ggtccttcaa actcacacct cccgggagga gctgtcctgg      120
cgccgggtcc cgcggggaaa atggtggagc cagggcaaga tttactgctt gctgctttga      180
gtgagagtgg aattagtccg aatgactcct tgatattgat ggtggagatg canggettg      240
aactccaatg cctaccccggt cagttcagca ntcagtgcc a ttantgcat tanaactang      300
tttgagagacc gaa      313

```

```

<210> 18
<211> 667
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(667)

```

<223> n = A, T, C or G.

<400> 18

actgccgggc	tcggcgtgag	tcgctgcggg	gctgacgggg	tggcagtgcg	gcgggttacg	60
gcctggtcag	accataatga	cttcagcaaa	taaagcaatc	gaattacaac	tacaagtga	120
acaaaatgca	gaagaattac	aagactttat	gcgggattta	gaaaactggg	aaaaagacat	180
taaacaaaag	gatatggaac	taagaagaca	gaatggtggt	cctgaagaga	atttacctcc	240
tattcgaaat	gggaatttta	ggaaaaagaa	gaaaggcaaa	gctaaagagt	cttccccaaa	300
accanagagg	aaaacacnaa	aaacaggata	aaatcttatg	attatgangc	atgggcacaaa	360
cttgatgtgg	accgtatcct	tgatgagctt	gacaaagacg	atagtacca	tgagtctctg	420
tctcaagaat	cagagtcgga	agaagatggg	attcatgttg	attcncnaaa	ggctcttggt	480
ttaaaagaaa	agggcnataa	atacttcac	aaggaaaata	tgatgaagca	attgactgct	540
acacnaaagg	cntggatgcc	gatccatn	atcccggtt	gccaacgaac	anaacntccg	600
catattttag	actgaaaaaa	tttgctgttg	ctgaatctga	ttgttattta	ncanttgct	660
tgaata						667

Bl
ma